Chapter 2

Mission of the Signal Tactical Satellite Company

2-1. General

- a. The TACSAT Company is organized and equipped to support a wartime TA. Its units normally operate in the COMMZ of a theater of operations.
- b. The TACSAT Company must provide versatile and responsive communications support in the TCS(A). Support requirements will be dependent upon—
 - (1) Satellite resource availability.
 - (2) Mission of supported headquarters.
 - (3) Force size.
 - (4) Geographical area.
 - (5) Capability of indigenous C-E facilities.
 - (6) Survivability of indigenous C-E facilities.
- (7) Support agreements with allied forces and host nations (for example, NATO satellite).

2-2. Structure

The TACSAT Company, tables or organization and equipment (TOE) 11–403, is a building block unit. It is designed to provide special capabilities, flexibility, and versatility required within the TCC(A).

- a. Mission. The TACSAT Company provides satellite communications for command and control of forces throughout the COMMZ, as designated by the theater commander. The TACSAT Company also has the capability to provide out-of-country service, DCS restoral, and contingency missions.
- b. Assignment. The TACSAT Company may be assigned to the TCC(A) or a subordinate theater signal brigade. The TACSAT Company is a category II unit. There is one TACSAT Company in a TCC(A).
- c. Type organization. The TACSAT Company is not adaptable to a type B organization employing indigenous personnel. See AR 310-31 for additional information on unit categories and type organizations.
- d. Organization. The TACSAT Company consists of the following. See figure 2–1 for an organization chart of the TACSAT Company.
 - (1) A company headquarters.
- (2) An AN/TSC-85A platoon with a platoon headquarters and two AN/TSC-85A terminal sections, each with three tactical satellite terminal teams.

- (3) An AN/TSC-93A platoon with a platoon headquarters and five AN/TSC-93A terminal sections, each with two tactical satellite terminal teams.
- (4) A support platoon with a platoon headquarters, a C-E maintenance/COMSEC section, and a motor maintenance section.

2-3. Command and control

The TACSAT Company may be placed under the command and control of the TCC(A) or other signal organization. Terminals will be widely separated. The commander's means for exercising internal command and control are discussed in *b* below.

a. Company Headquarters.

(1) The company headquarters provides the TACSAT Company commander the means by which he or she directs and coordinates operations and training. It plans and coordinates administrative and logistical support to the other elements of the TACSAT Company. Execution of plans and orders must depend on higher headquarters logistical sup-

port, especially transport priorities.

- (2) The TACSAT Company commander is responsible for successful accomplishment of all assigned missions and functions. The commander exercises command and control by issuing orders and directives to the operating elements. The TACSAT Company presents a unique command challenge. The wide dispersion of its terminal sections complicates normal administrative and logistic support. It is difficult to exercise command and control and provide leadership by telephone. The TACSAT Company platoon leaders and noncommissioned officers (NCOs), in effect, must function as staff and line leaders.
- (a) The first sergeant is the senior NCO in the TACSAT Company. The first sergeant acts in the name of the TACSAT Company commander when dealing with other NCOs and is the commander's principal enlisted advisor. The first sergeant supervises the functions of the enlisted personnel in the TACSAT Company. The fact that TACSAT Company personnel operate at a distance from company headquarters makes this task difficult. All TACSAT

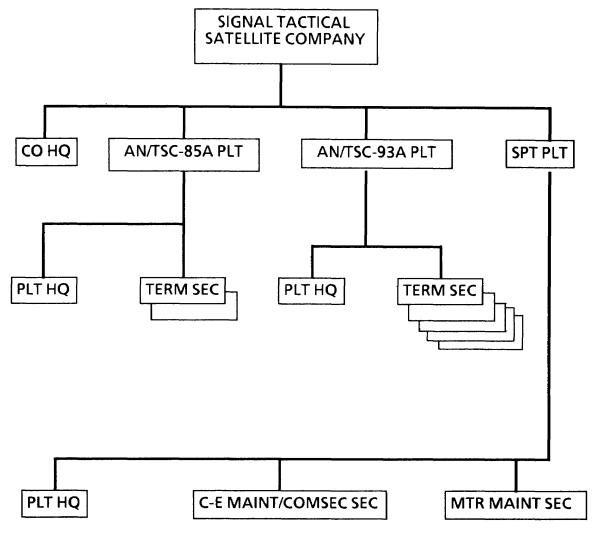


Figure 2-1. Organization of the Signal Tactical Satellite Company

Company NCOs must assume many tasks which would ordinarily be done for them in other type units. The first sergeant assists the commander by ensuring day-to-day tasks are performed, to include administrative, training, scheduling, internal operations, and counseling (enlisted personnel). The first sergeant maintains close contact with the sergeant major and command sergeant major of higher head-quarters.

(b.) The supply sergeant requisitions, stores, issues, and turns in TACSAT Company property. He or she is responsible to the accountable officer for all accountable TACSAT Company equipment. In many cases, day-to-day logistical support of sections must be coordinated with units of other commands.

(c) The chemical sergeant is responsible for the accomplishment of the company commander's NBC program. As a minimum, the chemical NCO serves as the principle NBC advisor to the TACSAT Company commander; ensures that authorized NBC equipment is requisitioned and is properly maintained; develops individual and collective NBC training for unit personnel; determines unit NBC team requirements and ensures that each team member is appointed on unit orders, is properly equipped, and thoroughly trained; ensures that NBC training is conducted in natural environments (for example, during physical training and while performing normal daily routines); evaluates individual and unit competence in NBC defense and advises

the commander on the unit's ability to survive and continue operations in an NBC environment; and prepares or supervises the preparation of the unit NBC defense standing operating procedure (SOP).

b. Resources available. The company commander has the following resources for command and con-

trol:

- (1) Existing common-user telephone network, if available.
 - (2) Local message centers.
 - (3) Internal telephone network.

(4) High frequency (HF) net.

(5) AN/TSC-85A and/or AN/TSC-93A voice orderwire.

2-4. Employment

The modern battlefield demands extensive command and control communications. The TACSAT Company augments the terrestrial communications systems in fulfilling these requirements. It is possible, that in special situations, other communications systems (for example, line of sight (LOS) and/or cable) may be used to augment the TACSAT Company.

a. Functions. At full strength, the TACSAT Company can install, operate, and maintain 16 satellite terminals. These terminals are ground transportable and can be installed and disassembled rapidly. They are also air transportable and cannot operate during transit.

b. Employment in the TCC(A). One TACSAT Company is assigned to a TCC(A). It is employed as a multichannel command and control net for the TA. Control of the TACSAT Company is determined by its level of assignment.

2-5. Operations

The TACSAT Company will augment communications links served by LOS, troposcatter, and HF radio systems. In some cases it may be the primary means of communications. Proper planning for terminal employment will reduce requirements for conventional radio. Satellite power and frequency allocations are controlled by the Defense Communications Agency (DCA). GMF allocations are managed by the GMFSC manager. Satellite access control is performed by the AN/MSQ-l14 in accordance with the USAISC Operations and Control Procedures for the GMF Satellite Communications System, Volumes I, II, III, and IV.

a. Capabilities. Tactical satellite communications systems can provide extended range, reliability,

flexibility, and survivability. All GMF super high frequency (SHF) terminals within a satellite's gimbal-dish antenna footprint can be served by one satellite. This allows for continuous communications between widely dispersed elements. If a mission changes, connectivity can be quickly reconfigured to meet new requirements.

b. Limitations.

- (1) The following are physical limitations of satellite facilities:
- (a) Must be located in an area with level ground and low horizon.
- (b) A high degree of physical security is required. Satellite facilities will be high priority targets.
- (2) The TACSAT Company requires support in the following areas:
 - (a) Medical.
 - (b) Religious.
 - (c) Finance.
 - (d) Legal.
 - (e) Personnel and administrative services.
 - (f) Food service.
- (*g*) Bulk petroleum, oils, and lubricants (POL) resupply.

(h) Supplemental transportation.

- (3) The Theater Army Area Command (TAACOM) will provide the following:
- (a) Direct support (DS) supply and intermediate (DS) maintenance for noncommunication electronics equipment.
- (b) General Support (GS) supply and intermediate (GS) maintenance for non-USAISC unique C-E equipment.
- (4) Army Aviation support from TA will be required to provide the maintenance support team transportation, critical equipment evacuation, and replacement flights.

c. Defense.

- (1) Members of the TACSAT Company may be used to conduct a coordinated defense of their area or a limited defense of an installation. Use of TACSAT Company personnel in defense may result in reduced communications support.
- (2) Operations in an NBC environment depends upon the ability of the individuals and the unit to achieve the standards of proficiency prescribed for NBC defense, the existing limitations of current NBC equipment, and the unit's overall vulnerability to NBC attack.

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(3) Chapter 10 discusses rear battle operations and operations in an NBC environment.

d. Mobility.

(1) The company headquarters has the following TOE vehicles to transport personnel and equipment throughout the area of responsibility:

(a) Truck Utility: Tactical 3/4 ton W/E

M1009.

(b) Truck Cargo: Tactical $5/4 ext{ ton } 4 ext{ } 4 ext{ W/E}$ M1008.

(c) Truck Cargo: 2-1/2 ton 6 x 6 W/E.

- (2) If more vehicular support becomes necessary, the TACSAT Company commander may use assets assigned to other elements of the TACSAT Company or request assets of the supported head-quarters.
- (3) Army Aviation support from TA should be requested for special or emergency movement of personnel and equipment.

2-6. Deployment

a. The company's multichannel SHH satellite

terminals—

- (1) Will augment HF, LOS, and troposcatter multichannel systems in the EAC.
 - (2) Operate in a portion of the DSCS.

(3) Provide a portion of the GMFSC system.

- b. In some cases, satellite communications will reduce the number of multichannel LOS and troposcatter radio systems. These multichannel terminals could then be used to support less critical and/or shorter communications links.
- c. A nondeployed TACSAT Company could have terminals in a theater, but terminals could also be deployed within CONUS to support staging bases. Current plans could require a deployed unit to have terminals on two different landmasses. Such deployment would further complicate command, control, and support.

d. Chapters 3 through 7 describe how a TACSAT Company is employed in a theater.